NOTE XXVI.

ON THE SPECIES OF THE GENUS JONTHOCERUS LAC. AND DESCRIPTION OF A NEW SPECIES FROM ZANZIBAR

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Some time ago I have had occasion, in speaking of the genus Cerobates Schh. 1), to note the logical position in the Brenthids arrangement of the genus Jonthocerus Lac. after the suppression of the subfamily Ephebocerinae lately proposed by Prof. Sharp. This position is among the Stereoderminae near Cerobates to which the genus Jonthocerus is allied. In this subfamily, Jonthocerus represents the South American genus Ephebocerus Schh. of the Trachelizinae.

The characteristic of all the species of this genus is, in the males, the remarkable development of the eyes occupying often the greater part of the head, and the long and slender antennae clothed with delicate hairs. The females have the eyes smaller and normal, the antennae shorter and more robust; it is not easy to distinguish them from Cerobates.

The genus has a wide geographical distribution, its species inhabiting Ceylon, Upper Burma, Penang, Singapore, Saigon, Japan, Borneo, Sumatra, the Andaman and Mentawei Islands, Java, New Guinea, Australia, finally Zanzibar and Cameroon.

¹⁾ Notes Leyden Museum, Voi. XVII, p. 209, 1896.

The species are moderately numerous and all probably live under the barks of the fallen trees, like J. nigripes, observed by Mr. Lewis in Japan. Two species, J. sondaicus and J. foveolatus, described by me are imported in Europe with dry tobacco from Sumatra.

In the following table I indicate all the species known to me at present and, subsequently treating of each species, I give only the taxonomical characters, being of opinion that anyone using these diagnoses has made himself familiar with the generic characters.

- A. Prothorax levis vel obsoletissime basi impressus.
 - a. Caput et rostrum prothoraci vix longitudine aequalia; prothorax omnino levis.
 - 1. J. papuensis Macleay.
 - aa. Caput et rostrum simul sumpta prothorace longiora; prothorax obsoletissime basi impressus.
 - 2. J. mentaweicus Senna.
- AA. Prothorax distincte canaliculatus vel basi foveolatus.
 - b. Caput ad latera pone oculos manifeste angulatum.
 - c. Oculi magni, frons valde angusta.
 - 3. Niger, opacus, elytrorum declivitate apicali fulva; metatarso postico articulis duobus
 - sequentibus unitis longiore. . J. carinensis Senna.
 - 4. Ferrugineo-rufus, metatarso postico articulis duobus sequentibus subaequali . . . J. Modiglianii Senna.
 - cc. Oculi mediocres, from latior.
 - 5. Niger, capite, rostro, antennis, prothorace humerisque

rufis; prothorace antice valde	
angusto, abdomine basi sim-	
pliciter impresso J. angulaticeps Senna	•
6. Ferrugineo-rufus, prothorace	
antice latiore, abdomine basi	
sulcato J. mimus Senna.	
bb. Caput ad latera pone oculos	
rotundatum, rare obsolete sub-	
angulatum.	
d. Prothorax simpliciter basi fo-	
veolatus.	
7 J. foveolatus Senna.	
dd. Prothorax plus minusve ca-	
naliculatus.	
e. Capitis vertex et occiput	
omnino leves.	
8 J. Pasteuri Senna.	
ee. Caput canaliculatum vel sul-	
catum.	
f. Elytrorum interstitium 2 um	
(1 ^{um} prope suturale) medium	
versus interruptum vel indi-	
stinctum.	
g. Oculi magni vel maximi,	
frons valde angusta.	
h. Elytrorum apex in medio	
fortiter excisus.	
9. Omnino testaceo-rufus, an-	
tennis albido-pilosis J. ophthalmicus Paso	3.
hh, Elytrorum apex in medio	
modice emarginatus.	
10. Rufo-ferrugineus, capite	
cum rostro, antennis elytro-	
rumque dimidia parte pos-	
tica nigris vel brunnescen-	
tibus, antennis albido-	
pilosis J. crematus Lac.	
Notes from the Leyden Museum, Vol. XX.	
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11. Rufus, antennis pedibusque
nigro-piceis, illis nigro-pi-
losis J. nigripes Lewis.
gg. Oculi minores, frons latior.
12. Rufo-brunneus vel rufo-fer-
rugineus, elytris dimidia parte
postica (apice excepto) brun-
neo-nigris J. sondaicus Senna.
ff. Elytrorum interstitium 2 ^{um}
(1 ^{um} prope suturale) medium
versus angustum sed conspi-
cuum.
i. Prothoracis sulcus usque ad
apicem prolongatus.
13. Niger, antennis pedibusque,
interdum elytris postice brun-
nescentibus J. zanzibaricus, n. sp.
ii Prothoracis sulcus levior

ii. Prothoracis sulcus levior, pone medium carens.

14. Capite et prothorace rubrobrunneis, pedibus elytrorumque lateribus dilutioribus, elytrorum tertio basali et regione suturali nigris J. Conradti Senna.

1. J. papuensis Macleay.

Proceed. Linn. Soc. New South Wales, 2 ser., I, p. 194, 1886.

Distinctive characters: » Pale piceous red, head and rostrum together scarcely equal in length to the prothorax, all of these perfectly smooth. Antennae short, reaching to the base of the elytra, prothorax without median line, elytra with a raised suture and a depressed space on each side broadest at the base and running out before the apex, with two fine carinae in them. Length 2 lines".

Hab. Fly river (New Guinea).

The above characters are taken from Macleay's descrip-Notes from the Leyden Museum, Vol. XX.

tion which is undoubtedly based on a female specimen. This species is unknown to me and I have also some doubts as to its belonging to this genus.

2. J. mentaweicus Senna.

Ann. Mus. Civ. Stor. Nat. Genova, ser. 2a, Vol. XIX (XXXIX), p. 228, 1898.

Distinctive characters: Ferruginous red; head rounded behind the eyes, these moderate and scarcely approximate on the front; prothorax shorter than the head and rostrum together, smooth, very obsoletely impressed near the base; elytra slightly striate at the sides, the apex angularly cut in the middle, the external angles rounded. Length 5 mill. \Im .

Hab. Mentawei Islands (West of Sumatra).

3. J. carinensis Senna.

Ann. Soc. Ent. Belgique, Vol. XXXVIII, p. 362, 1894.

Distinctive characters: \circlearrowleft . Opaque black, elytra at the tip fulvous; head angulate behind the eyes, furrowed above, eyes large, very approximate on the front; prothorax channeled; elytra striate also at the sides, the apex emarginate in the middle, the external angles obtusely acuminate; hind metatarsus longer than the two following joints together.

Q. More robust, brown black, shining, elytra at the tip fulvous; head and front broader, eyes smaller, antennae shorter and more robust, with the joints oblong-ovate; prothorax broader, with the furrow deeper; tip of the elytra margined and rounded; tarsi shorter. Length 6—9 mill.

Hab. Upper Burma.

4. J. Modiglianii Senna.

Ann. Mus. Civ. Stor. Nat. Genova, ser. 2a, Vol. XIX (XXXIX), p. 228, 1898.

Distinctive characters: Ferruginous red; head angulate behind the eyes, these large, nearly touching in front,

occiput furrowed, with the margin of the furrow raised; prothorax channeled; elytra indistinctly striate at the sides, the apex angularly cut with the external angles obtusely acuminate; hind metatarsus nearly as long as the two following joints taken together. Length $4^{1}/_{4}$ mill. 3^{1} .

Hab. Mentawei and Andaman Islands.

5. J. angulaticeps Senna.

Notes Leyden Museum, Vol. XX, 1898, p. 53.

Distinctive characters: \circlearrowleft . Black, head, rostrum, antennae, prothorax, shoulders of the elytra and legs ferruginous red; head angulate behind the eyes, channeled in the middle, eyes moderate, more separated on the front than in J. Modiglianii Senna; prothorax channeled; elytra distinctly striate also at the sides, the apex emarginate, the external angles margined and rounded; metasternum and base of the abdomen shallowly impressed.

Q. Eyes smaller, frontal region broader, antennae shorter and more robust, with the joints oblong-ovate; tip of the elytra margined and rounded. Length $5-6^{1}/_{2}$ mill.

Hab. Western Java.

The var. borneensis Senna, from Borneo, has the eyes a little larger and more approximate on the front and at the base of the head; the elytra are ferruginous red near the base.

6. J. mimus Senna.

Ann. Mus. Civ. Stor. Nat. Genova, ser. 2a, Vol. XIX (XXXIX), p. 229, 1898.

Distinctive characters: Ferruginous red; head distinctly angulate behind the eyes, singly impressed above, eyes moderate, less approximate at the base of the head than in the preceding species, front moderately narrow; prothorax channeled, broader anteriorly than in *J. angulaticeps* Senna; elytra distinctly striate also at the sides, the apex emar-

ginate, the external angles margined and rounded; apical half of the metasternum and base of the abdomen furrowed. Length 5 mill. 7.

Hab. Mentawei Islands.

The var. sumatrana Senna differs by having the eyes more approximate at the base of the head, the elytra blackish in the posterior half and the apex more emarginate with the external angles more regularly rounded.

7. J. foveolatus Senna.

Bull. Soc. Ent. Ital. XXV, 3, p. 300, tav. II, fig. 4, 1893.

Distinctive characters: Ferruginous red, head, rostrum and prothorax darker; head rounded behind the eyes, furrowed above, front very narrow, eyes large; prothorax foveolate at the base; elytra indistinctly striate at the sides, the apex angularly cut in the middle, the external angles margined and regularly rounded. Length $4^{1}/_{2}$ mill. \mathcal{J} .

Hab. Sumatra.

This species is imported in Europe with dry tobacco (Grouvelle).

8. J. Pasteuri Senna.

Notes Leyden Mnseum, Vol. XX, p. 55, 1898.

Distinctive characters: Brown-red; head rounded behind the eyes, smooth above, eyes very large, nearly touching the base of the head and very approximate on the front; prothorax channeled; elytra indistinctly striate at the sides, the apex emarginate, the external angles margined and rounded; metasternum and base of the abdomen channeled. Length $6^{1}/_{2}$ mill. \mathcal{J} .

Hab. Western Java.

9. J. ophthalmicus Pascoe.

Ann. and Mag. of Nat. Hist. ser. 4, Vol. X, p. 320, pl. XV, figs. 4, 4a 7, 1872.

Distinctive characters: Ferruginous red; head rounded or indistinctly subangulate behind the eyes, furrowed above,

eyes large and approximate on the front, antennae clothed with whitish hairs; prothorax channeled; elytra as in the preceding species but with the apex more emarginate and the external angles more produced. Length 5—7 mill. 3.

Hab. Queensland and Sumatra.

10. J. crematus Lac.

Gen. Coléopt. VII, p. 416, 1866.

Distinctive characters: Ferruginous red, head, rostrum, antennae and apical half of the elytra black or blackish; head rounded behind the eyes, channeled above, eyes large and very approximate on the front, antennae clothed with whitish hairs; prothorax channeled; elytra as in the preceding species, the apex emarginate and the external angles margined and subangulate. Length 7 mill. 3.

Hab. Ceylon.

11. J. nigripes Lewis.

Jonrn. Linn. Soc. Vol. XVII, p. 298, pl. XII, fig. 5 6, 6 Q, 1883.

Distinctive characters: A. Red, antennae and legs nearly black; head rounded behind the eyes, furrowed above, eyes large, nearly touching in front, antennae nearly as long as the body and clothed with black hairs; prothorax furrowed; elytra indistinctly striate at the sides, the apex slightly emarginate in the middle, the external angles rounded.

Q. Antennae robust, a little longer than the head and prothorax, eyes moderate, front broader. Length 3—4 lines. Hab. Japan.

12. J. sondaicus Senna.

Bull. Soc. Ent. Ital. XXV, 3, p. 302, tav. II, fig. 5, 1893.

Distinctive characters: Brown-red or ferruginous red, the posterior half of the elytra (the apex excepted) blackish

or black-brown. Allied to *J. crematus* Lac. but smaller, the antennae clothed with whitish hairs, the eyes smaller and less approximate at the base of the head, front broader, elytra more emarginate at the apex and more distinctly striate at the sides. Length $4^3/_4$ mill. 3^3 .

Hab. Sumatra.

This species is imported in Europe with dry tobacco (Grouvelle).

13. J. zanzibaricus, n. sp.

Shining black, legs, tip of the elytra, in one of the specimens also the sides, brownish. Head not angulate behind the eyes, channeled above, front very narrow, eyes large, rounded, very approximate at the base of the head, metarostrum slightly channeled in the middle and at the sides, attenuate anteriorly, prorostrum shorter, scarcely broader at the tip. Antennae nearly as long as the entire body, with the joints 3—11 cylindrical, clothed with whitish hairs, shorter than those of the eastern species.

Prothorax strongly constricted anteriorly, channeled above, the sides regularly curved.

Elytra elongate, with the shoulders a little raised, the sides almost parallel, the apex emarginate, the external angles sub-acuminate; deeply tristriate along the sutural interstice, this latter broad, deplanate, the following narrow in the median portion but more distinct than that of some eastern species; elytra at the sides also distinctly striate, the striae not so deep as the sutural ones.

Legs regular, hind metatarsus longer than the following two joints taken together.

Body beneath brown, shining, head and metarostrum almost keeled in the middle, the remaining portion of the rostrum excavate; metasternum and base of the abdomen channeled. Length $5^{1}/_{2}$ mill.

Hab. Zanzibar.

Two males, captured by Mr. Raffray, in the Genoa Museum.

J. zanzibaricus m., the second species of this genus

recorded from Africa, is easily distinguishable from the eastern species by the joints of the antennae which are clothed with shorter hairs, and by the 2nd dorsal interstice which is broader in the middle portion of the elytra.

14. J. Conradti Senna.

Deutsche Ent. Zeitschrift, 1898, II, p. 374.

Distinctive characters: J. Red-brown, legs, tip and sides (except the base) of the elytra more reddish, basal third and sutural region black; head not angulate behind the eyes, above obsoletely channeled, front narrow, eyes very large, antennae clothed with short whitish hairs; prothorax slightly and briefly channeled; elytra with the 2nd interstice as conspicuous as in the preceding species, the apex emarginate and the external angles obtuse. Length 7 mill.

Hab. Cameroon.

Florence, September 1898.